

REMARKS

The present claims relate to a porous ceramic material and a process for producing a porous ceramic material.

Amendment summary

Upon entry of this Amendment, claims 1-18 will be pending.

Claim 1 has been amended to recite a porous ceramic material comprising a fibrous structure, wherein the fibrous structure comprises mesopores having a diameter of 2 nm to 50 nm on the surface of the fibrous structure. Support for this amendment is found in original claim 1.

No new matter is added by this Amendment, and Applicants respectfully submit that entry of this Amendment is proper.

Response to rejection of claims 1-7 under 35 U.S.C. § 112

In the Office Action of February 8, 2007, claims 1-7 are rejected under 35 U.S.C. § 112 as allegedly being indefinite. Specifically, the Examiner asserted that the phrase “eliminating the fibrous matrix from the resulting fibrous mixture bearing the deposited metallic compound on the outer surface thereof” was indefinite. Applicants respectfully submit that claim 1 no longer recites the phrase in question and respectfully submit that this rejection has been rendered moot. Therefore, Applicants respectfully request the withdrawal of this rejection.

***Response to rejections under 35 U.S.C. §§ 102/103 of claims 1-7 based on Ying
and claims 1-5 and 7 based on McGrath***

In the Office Action, claims 1-7 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over Ying et al. (U.S. Patent No. 6,028,025) (hereinafter “Ying”). In addition, claims 1-5 and 7 are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over McGrath et al. (U.S. Patent No. 6,638,885) (hereinafter “McGrath”). However, Applicants respectfully submit that neither Ying nor McGrath anticipate or render obvious the present claims.

The present claims recite a porous ceramic material comprising a fibrous structure. The fibrous structure comprises mesopores having a diameter of 2 nm to 50 nm on the surface of the fibrous structure. The claimed porous ceramic material has a very large specific surface area, is fibrous, is flexible, and is useful as a photocatalyst (or other type of catalyst), a catalyst carrier, a sensor, and an oxide conductor (see, e.g., pages 18-19 of the present specification).

On the other hand, Ying discloses a catalyst, but does not disclose that the catalyst has a fibrous structure. Ying also does not disclose that the catalyst therein comprises mesopores on the surface of the fibrous structure. Accordingly, Applicants respectfully submit that Ying does not anticipate or render obvious the present claims.

Similarly, the structure disclosed within McGrath does not correspond to the presently claimed porous ceramic material. Rather, the composition in McGrath is a mesostructured silicate formed by templating L₃ liquid crystals (column 4, lines 39-40). Accordingly, McGrath

discloses a composite comprising a nonperiodic network (see, e.g., column 3, lines 23-26; column 4, lines 14-17). Therefore, Applicants respectfully submit that McGrath does not anticipate or render obvious the presently claimed invention.

As discussed above, neither Ying nor McGrath disclose or suggest the presently claimed porous ceramic material, and Applicants respectfully submit that neither reference anticipates or renders obvious the presently claimed invention.

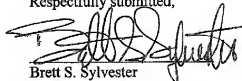
Applicants respectfully request the reconsideration and withdrawal of the §§ 102/103 rejections based upon Ying and McGrath.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Brett S. Sylvester
Registration No. 32,765

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: June 8, 2007